

FIG. 1

SEQ ID NO:1 S0015

1 tattttcac gtgattcagc gaagataaca ctcttaaac act[p:gcaattt ccactggaag
 61 aat]tagcacg aatttgagat gttttcac cgaaagataa gttcataact aaggtgttc
 121 ttcttcaa caaacaagat ataaagtca accagattt acattttga aaaccttta
 181 tcttacata tatcagtggg ggagttgaaa tggagatac atcaactcta aatttagagaa
 241 atttttagga tacaactaaa caagttAAC caaatttccc ttgtcctaaa cagcaaatga
 301 ttcaagtga[10c]a cattgggttgcattagcgac ttcaaaaccta ttgtcttctt ttcattttt
 361 caaatttcta gctctacaac taattcaatg actactcagt taaaacaaa acaaattggaa
 421 gattgggtgg gagattt[17a]ag aagaaaacttgcaggtggg gcttggtccg tggagggaaag
 481 agggctcagg ggcttaaccac ctcgcaactt agggctctgg cctccgtctc ccgcctttc
 541 gccgagagcc cgcaaggtga cagagtgcgg cgaggtgcac acttcggccg tt[29c]ggggcgc
 601 ccgcgtcggg cgtccggcgc gcgtcgtgg tcggggact gagggcagct actcagctag
 661 accgctggag cccaaaggaa tctaaggta catgctgtct tggagcctt atttatggg
 721 cctgcgactt tgcaggtagc cgaggcatat tggaaaat ttaatttagg tctctcaatt
 781 tgcgtcgag cctgaaatttcaacttgcac cgcaaaaacta gat[q:acatgc attccccaaac
 841 tta]gttaagg tagcagtggg ggtggcagc cagcgaggag gcccgtggg gtcgtatg

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

10ksh:t, 10krr:t, 10tgr:t, 10mnk:t, 10yma:t, 10tkh:t, 10akk:t, 10mtb:t,
 10hit:t, 10mmm:t, 10fom:t, 10don:t, 10ssk:t, 17ksh:g, 17krr:g, 17tgr:g,
 17mnk:g, 17yma:g, 17tkh:g, 17akk:g, 17mtb:g, 17hit:g, 17mmm:g, 17fom:g,
 17don:g, 17ssk:g, 29ksh:t, 29krr:t, 29tgr:t, 29mnk:t, 29yma:t, 29tkh:t,
 29akk:t, 29mtb:t, 29hit:t, 29mmm:t, 29fom:t, 29don:t, 29ssk:t

2/30

FIG. 2

SEQ ID NO:2 S0040

1 tttaactta ttgttagtat tagtactagc tctgggtgtc tatcac[p:tctg ctgcctctgc
61 acatac]tgat ctagaacaca catgttctct acttctctgc agtcaactgct actgacatgt
121 gggccctact ctcttggc cagcatgtca gtgtcagcag aggatctcat tcctacagtc
181 aatccatgtg tgctactccg taaaaaaaaac gaattccaag ctacaaacct aaacacgtt
241 ttttggacgg aggggtatat ataaacaaag aaaaagcact gtaggtacat aatatagtag
301 tag[7a]tcagtc ttattacagc tgttaaaaa cagttcagta tatagtgaat ctatggtc
361 tgttgctact gcagttatt ggctctggtt gctttgttg atctgttgct actgcagtt
421 attagctccg gttgcttagt tgatcaagtt aattagctct ggctgtgcc taatcaa-aat
481 tcatatatag tagcttcaag cacgacatac cacctttcct accttctggc ggataactcct
541 ctctttata atttctgcag taagcttcaa acataagtag acactgccat taattaaaca
601 agcacagtga attaaccagg atatgtgtaa tctgcataact aattaaattt gttcgtgcc
661 agttcaaggc agccacaacc acatacaggc gatccatata ttgatttata tatctgatcc
721 gtttggtagt gttggcgtat caatcccccc tgaaggcagct atgtcgagcc taattgcgt
781 ttgattaatc aattttctc atccaacgat ttaattatgc gtgattttaa tgattcgatc
841 ggtacagttt ttttctctt tcttcagtgc tagtgcttct actagtattc gtgacaataa
901 cctgtcggat ttgaaatata tgat[q:tgctga tgtgggtgtc tttt]attaa caagcccttg

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

7yki:t, 7krr:t, 7tgr:t, 7ghm:t, 7mnk:t, 7yma:t, 7hez:t, 7ksh:t, 7akk:t,
7hnh:t, 7hit:t, 7mmm:t, 7fom:t, 7ssk:t

FIG. 3

SEQ ID NO: 3 S0279

1 tagcattagg ataaaa[p:gggg cgctcattca aaactt]taaa atatcaaaga acacccttt
 61 gagattgaat tgcttcttct ggtctttgcc tcttcttcg ctttcagca ccagaatcgt
 121 acttcctatt tctagctgac ataatgagga ttgagggaaat aagtgtctc ctattcata
 181 aacaaaagaa aagtaattt [1a]gtcaaacag tcacatcaactt attaagttt tgattcaatc
 241 gatagtttga ttcatattac atctactatt tgatacgaga ctcaatgtct caactcttaa
 301 gtctaaaagt aacttccaa tgctgcacaa aggttagt cagggacacg aagat[3a]agtg
 361 gatgagagggc actgacaaag gtagccggcc aaccgcttgg cattgatggc gctgcccgt
 421 tggcgctcg ctgcctcgta ttgggctgg[5g] gtcggactt tgcaggcatc gtcatttcat
 481 cgtcgaattt gaaatcgaga ttgactccag tca[7c][8a]cgaca tgactacaca
 acagtgtgac
 541 ttgatctcg t[9c]gcctctca gcctccaatg cacctgatgg cagatggcc tctctaatcg
 601 attcacaggt agaagcagga ttgtggctcg gctatgcatt aatgtgcgcc tctccgatta
 661 acttgggtgc cccaaaaaaa ttgggggaca ctct[11a]tcatc gccaatgtcg cacacaacct
 721 tcgacaggct tgcccattag tgtgacactc ctgcccacat cactgctcca ttgtcatcca
 781 tcacttgtc ga[q:ccattgtg gtgtccaaa cc]gcggctgt cgtctgtttg tgattttga

 nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

1ksh:t, 1hts:t, 1mth:t, 1yki:t, 1krr:t, 1tgr:t, 1ghm:t, 1mnk:t, 1yma:t,
 1hez:t, 1akk:t, 1ash:t, 1ank:t, 1mtb:t, 1hnh:t, 1ymt:t, 1hit:t, 1mmm:t,
 1fom:t, 1don:t, 1knh:t, 1ssk:t, 3ksh:g, 3hts:g, 3mth:g, 3yki:g, 3krr:g,
 3tgr:g, 3ghm:g, 3mnk:g, 3yma:g, 3hez:g, 3akk:g, 3ash:g, 3ank:g, 3mtb:g,
 3hnh:g, 3ymt:g, 3hit:g, 3mmm:g, 3fom:g, 3don:g, 3knh:g, 3ssk:g, 5ksh:a,
 5hts:a, 5mth:a, 5yki:a, 5krr:a, 5tgr:a, 5ghm:a, 5mnk:a, 5yma:a, 5hez:a,
 5akk:a, 5ash:a, 5ank:a, 5mtb:a, 5hnh:a, 5ymt:a, 5hit:a, 5mmm:a, 5fom:a,
 5don:a, 5knh:a, 5ssk:a, 7ksh:t, 7hts:t, 7mth:t, 7yki:t, 7krr:t, 7tgr:t,
 7ghm:t, 7mnk:t, 7yma:t, 7hez:t, 7akk:t, 7ash:t, 7ank:t, 7mtb:t, 7hnh:t,
 7ymt:t, 7hit:t, 7mmm:t, 7fom:t, 7don:t, 7knh:t, 7ssk:t, 8ksh:g, 8hts:g,
 8mth:g, 8yki:g, 8krr:g, 8tgr:g, 8ghm:g, 8mnk:g, 8yma:g, 8hez:g, 8akk:g,
 8ash:g, 8ank:g, 8mtb:g, 8hnh:g, 8ymt:g, 8hit:g, 8mmm:g, 8fom:g, 8don:g,
 8knh:g, 8ssk:g, 9ksh:t, 9hts:t, 9mth:t, 9yki:t, 9krr:t, 9tgr:t, 9ghm:t,
 9mnk:t, 9yma:t, 9hez:t, 9akk:t, 9ash:t, 9ank:t, 9mtb:t, 9hnh:t, 9ymt:t,
 9hit:t, 9mmm:t, 9fom:t, 9don:t, 9knh:t, 9ssk:t, 11ksh:g, 11hts:g, 11mth:g,
 11yki:g, 11krr:g, 11tgr:g, 11ghm:g, 11mnk:g, 11yma:g, 11hez:g, 11akk:g,
 11ash:g, 11ank:g, 11mtb:g, 11hnh:g, 11ymt:g, 11hit:g, 11mmm:g, 11fom:g,
 11don:g, 11knh:g, 11ssk:g

FIG. 4

SEQ ID NO: 4 S0044

1 tccaaaatcc aca[p:tgcaatg tgccattcca tag]gaatttc atgggatttg aaaatcgta
61 atccttgaa tcaaatggcc aaatagggaaa attcgtata ggatttgaat cctatgaaaa
121 tcctatataa atccttgat tcaaagggcc ctaagttcg tacgttgca actgtgcac
181 cagcacgtac tactacgtac tcctatgtac ttgtatgggt gtagcctata catatgcac
241 aagcgttcca ggaaaaatag gagtctcagt aatttgcac ggcacatgcggc ccatggagta
301 atagaccatcg ctgaataatt tcagttcaaa tttcatactc caactgtaat accatacgca
361 aaccatcaac ttacaa[4t]act gatatactt acatttcaaa ataacatagc cttgggttt
421 agctgacgta gcgactgagt aagcttagcac gaggctcata tgggtccac atgtcagcgg
481 cccaaatcttc ttccacatct ctcctcttt cccaaatccta atctctcc atgcctctag
541 ggtgggggggtggaaagaa gctcgacagc ggtggccaaac acatacgcaa ggagaagctc
601 gaggactgca agacgacttt ctttcgcctt accactggaa ggcaacacact tggggccctg
661 cttcttagtt gagcgaggac actgaatgca tggaggtgtt gtgacccaaa tctacggcag
721 aatccctcgc cgaaatcgc ccggagatct agcagagaag aggcgagaag aacaggtag
781 aaaggggaaa cacgaggaag cagctggga ggaggatatt tttcatttct ttcatgaatt
841 gtttctcaa tacagctgga gtatataac tcacgcactc caccccttt gccc[q:ttaggg
901 cccacccgtt cata]gacact tctatctata aagagtagaa gatgtattca cttctgaaaa

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

4ksh:c, 4ymt:c, 4don:c, 4knh:c

5/30

FIG. 5

SEQ ID NO: 5 S0252

1 tgctgcatgt ttcagtccaa gctagg[p:cgcc acagaacgga caaaaag]taag aaaatcgcta
61 cgtacaactc acgtctgacc agcacttagc tgctaattgc cctagccaca tggagagaag
121 ttggtctgcg tgaagcgtaa cgattggcag ataaagttgg at[2t]ggatggg aatcggacga
181 gggagtcgaa cgtatagcaa cactccagaa gtaaagcagt aaaccgaaaa agtttgcta
241 tcacttgtat gaccgtctcc acaagtggcg actggcacga catggccact cgacagaacc
301 gcacacaacaaa tgctgatcct ttgcccctat tccatgcgaa gttgcgactt gcgagtctt
361 gggcagggca tgcactactg acaagatgaa agaagaaaaat caaccgtaat tcgggcgtgc
421 actgctgcag aatagtcctt gtgatcatgt ccatgtgacc atgttcgtta cgttctgagg
481 cgctcgatagc gagcgtatgct ggtaatcgta accaatctcg ttcacgtcca ccttggttgac
541 gcgcacgtac gtcgctatat atgacaacgt cctgctacat atagccttgc tcactttcgg
601 actttgacgt atgtgaagag agcacgacta ggagccacta atcatatggt ttggtaatcatg
661 agaggatatg catgtttcac tttgcaccca acatgtactg tactcatcta gtcatcctac
721 tagtattttc catcggtgtc ccttctcct gtgatctctc gctttgcaca caaacctcgc
781 aacaaaacgg tctcgctgtc gccttcagc [q:gcttcggcaa aggattggtc] ggttcatgag
nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

2hts:c, 2mth:c, 2yki:c, 2krr:c, 2yma:c, 2hez:c, 2ank:c, 2mmm:c, 2fom:c,
2don:c

6/30

FIG. 6

SEQ ID NO: 6 S0109

1 aattattattt attattattt ccaatcagcc atatatatgg cttgccaa[p:cc gatggcagca
61 caaatctt]tc gcgtccgttt gaaccattc ttcaaacttg aagttggatt tggacgtaat
121 agaagggtgca gttgttcaact tggcgttgc atcaacgtgt acggttgaac aaatcggtgg
181 atctctttag gttaacgtgc cctgttgcgt tctgaaaacc catctgttct ttgttctaac
241 tcctatctta tcctctcatt tttttcgct tggtctcaac ttcgtgttct actagtttg
301 aacgagtcac tcactcgac tcgagagctc tgaacttctg aacaagccaa aatgctgtct
361 gaaccgagat cttcttgcgc ctgtcaggct gtcacaaact cgcaatccaa ttgcacttcc
421 agcggtttag caggttcaat tcaacatgac tttcatcagg agatggtaag ttaggaacag
481 attactgtca caactcacaa cagttattac tact[1a]tcgca accaaatgcta gctgtcctta
541 tcctcatcga ctggatactt cagaaacaag cataacagta gcattggagc aaaggacaca
601 gcatggctag aagtagatgc tgc[2tgc]ctag agataatcatc tcgaattcat ggcataaca
661 aacgtcggttc atgcagccat gcaggaataa taagctcaga acaggattca ggacaaattc
721 aagctatcta caagcttgcc agcatcatca tattataata attgctttaa tagtcagcaa
781 actcgtacag aatagccaga tccaaatttc cacaaactat atatcatcat caggaattt
841 aaāaagagaa ctcggaatcg atttcgcatg atattcga[q:gg acacccaagc caaactga]cg

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1mth:g, 1krr:g, 1tgr:g, 1ghm:g, 1mnk:g, 1yma:g, 1ksh:g, 1akk:g, 1ank:g,
1hnh:g, 1ymt:g, 1hit:g, 1mmm:g, 1fom:g, 1don:g, 1knh:g, 2mth:-, 2krr:-,
2tgr:-, 2ghm:-, 2mnk:-, 2yma:-, 2ksh:-, 2akk:-, 2ank:-, 2hnh:-, 2ymt:-,
2hit:-, 2mmm:-, 2fom:-, 2don:-, 2knh:-

7/30

FIG. 7

SEQ ID NO: 7 S0115

1 taaccacttg cttagttgc tgcatgctta gtacatcagt actgtcatg[p:c cattggttgg
 61 tgtggctgt]g agtgaacatt gtgcagcaga gaagcaagca acaatagcat tggacccca
 121 agaaccagta cattatctct atctgtgaca gagaacacaa gaatgcaa at gctgataaag
 181 aatcaagaaa gcattgtgca gcagcaagg tgagtagaga gtgatggaag cagagagaag
 241 ctgcag[1a]cta gtgatgaaaa tgattggta gtacagtgt acaactaaca acaagtctct
 301 atgaagaagc aggtactaag catgcattgtg tgtgtgtgt t[2-]gatggcatg tggtatcaat
 361 gcttctgggg ttgttcactt gtccaccaga gcaaccagga caagtcttct cactctacca
 421 ttccgggtgc attttctctc tcaacccttc ctcttgc tttagcaagc ctgcagctta
 481 aactagatta tgtttcttt cctcaataaaa gattaatagt attgttaatc atg[3a]catctt
 541 tccctcacct gtttctctc caagagagag gaggagggtgc acaggcacag acagctcaca
 601 caaacattgt gttgttcatg tctctttctt gcctacctt gttgaactgg tttgccttgg
 661 gagacacaca ggacactcga ggctgcctgg ctggcctctt tgtcagggag aaacctgcta
 721 atctgctata atagtggtgc ttataattct atgattctat ccatcacaaa ggacacagta
 781 tagctgcata ctttaactgc agcttgcagg ccttttcat cgtttacttg t[q:tagcttac
 841 agccgcgacc a]aaattttta gtactaaaac tcaatattag agttgatgtt agggttttt

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

1hts:c, 1mth:c, 1yki:c, 1krr:c, 1mnk:c, 1hez:c, 1ksh:c, 1akk:c, 1ank:c,
 1hnh:c, 1ymt:c, 1hit:c, 1mmm:c, 1fom:c, 1knh:c, 2hts:gt, 2mth:gt, 2yki:gt,
 2krr:gt, 2mnk:gt, 2hez:gt, 2ksh:gt, 2akk:gt, 2ank:gt, 2hnh:gt, 2ymt:gt,
 2hit:gt, 2mmm:gt, 2fom:gt, 2knh:gt, 3hts:c, 3mth:c, 3yki:c, 3krr:c, 3mnk:c,
 3hez:c, 3ksh:c, 3akk:c, 3ank:c, 3hnh:c, 3ymt:c, 3hit:c, 3mmm:c, 3fom:c,
 3knh:c

FIG. 8

SEQ ID NO:8 S0107

1 tgtatagtgt caaatttact cataggttgc ttgttt[p:tgc gatggaggga gtattgg]ttt
 61 gactggatgg gtcatggaaa actggaaaag caacagcggt atgcatggca aaagagggac
 121 aaaagaacaa gacgaaacat aggttaggatt gcaggatgct caagtgagaa cttagttagttg
 181 tagatgaagt gaagtgacaa gccgaagtcc cgtgaacgaa gcaacaaaaa attgtggag
 241 tttcc[1a]ttt gttgtatg[2t]g tattattgc gatttgaat ccaggctgtg
 tttagttcct
 301 tccaaa[3g]tta gaagtttggg ttgaaattga taccatgtga ctgaaaagtt
 gtgtgtgt[4-]at
 361 gacaggttga tgtgatggaa aaagtttcaa gtttg[5a]attc aaagtttggaa tctaaacaca
 421 gccccaatgt ttaaaagagaa ctt[8t]aacat taaatttggc cacgaccggt aagccgataa
 481 acaaaaagatg agaataaaagt actgtatata caacttccag cctcatctt tcacttatgc
 541 ttatgtttat caactaaaat ttaaatttgc aaccttaat ttagagtgtga ttttagggtt
 601 tttttatcg aagtttattt ttagcctt acttttagat ctaggaaca cgtatatgaa
 661 aaaatttattt ttcatggca attataccgt ttgtcttatt ccctatataa gcgaaacgag
 721 ggaccttccc tgtcttgctt gtgatcatca gtcatctcat ct[13a]tccgctg gatgtgaagt
 781 tacgacagaa atgatccatc gttcaacttg aattacactt gtact[q:actag cggtgtacgc
 841 tcgca]tgtca gcgtaacgaa acgatgacat cgcacatcaca gtaggagtat tggtaataat

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

1mth:t, 1yki:t, 1krr:t, 1tgr:t, 1ghm:t, 1mnk:t, 1yma:t, 1hez:t, 1ksh:t,
 1tkh:t, 1akk:t, 1ash:t, 1ank:t, 1mtb:t, 1hnh:t, 1ymt:t, 1hit:t, 1mmm:t,
 1fom:t, 1don:t, 1knh:t, 1ssk:t, 2mth:c, 2yki:c, 2krr:c, 2tgr:c, 2ghm:c,
 2mnk:c, 2yma:c, 2hez:c, 2ksh:c, 2tkh:c, 2akk:c, 2ash:c, 2ank:c, 2mtb:c,
 2hnh:c, 2ymt:c, 2hit:c, 2mmm:c, 2fom:c, 2don:c, 2knh:c, 2ssk:c, 3mth:a,
 3yki:a, 3krr:a, 3tgr:a, 3ghm:a, 3mnk:a, 3yma:a, 3hez:a, 3ksh:a, 3tkh:a,
 3akk:a, 3ash:a, 3ank:a, 3mtb:a, 3hnh:a, 3ymt:a, 3hit:a, 3mmm:a, 3fom:a,
 3don:a, 3knh:a, 3ssk:a, 4mth:gt, 4yki:gt, 4krr:gt, 4tgr:gt, 4ghm:gt, 4mnk:gt,
 4yma:gt, 4hez:gt, 4ksh:gt, 4tkh:gt, 4akk:gt, 4ash:gt, 4ank:gt, 4mtb:gt,
 4hnh:gt, 4ymt:gt, 4hit:gt, 4mmm:gt, 4fom:gt, 4don:gt, 4knh:gt, 4ssk:gt,
 5mth:g, 5yki:g, 5krr:g, 5tgr:g, 5ghm:g, 5mnk:g, 5yma:g, 5hez:g, 5ksh:g,
 5tkh:g, 5akk:g, 5ash:g, 5ank:g, 5mtb:g, 5hnh:g, 5ymt:g, 5hit:g, 5mmm:g,
 5fom:g, 5don:g, 5knh:g, 5ssk:g, 8mth:c, 8yki:c, 8krr:c, 8tgr:c, 8ghm:c,
 8mnk:c, 8yma:c, 8hez:c, 8ksh:c, 8tkh:c, 8akk:c, 8ash:c, 8ank:c, 8mtb:c,
 8hnh:c, 8ymt:c, 8hit:c, 8mmm:c, 8fom:c, 8don:c, 8knh:c, 8ssk:c

9/30

FIG. 9

SEQ ID NO: 9 S0126

1 attacaaaaa ttatatgaac atgcttaaac aatttacaag aataattctg gttgatg[p:gct
61 tgaggcacgt caaaatg]ttt cataaagtgt gaagtgaggta taactcaact ggttatgttt
121 tttatggaa tcagtcacc taagttgaag tcctagactt acgcccgtgc ttgtatttat
181 tgttaatttt ttttcgtgc tagacgccta tcatgacttc gttaatctca agatatgctc
241 gcacagtctt tcggaggtgc tcataatgagt aagatgtgcgt tgtgtacgtt catatgagtg
301 agtatacgtg tgctacgaga gtctgcgtat acagtgtgct tctacaaaaa aatgtttcag
361 agtaaatttc acaaaaactgc aggtactttg atcaaattat tataaaacta cagatttaat
421 gtgatgtatt acaaaaactac atatttaacc atgaaattat tacagaacta caga[19t]ttaag
481 attaagtatc acaaaaactac aaatttaata ataaaattat cacaagata taggtttgg
541 ggtttaaattt cttagcacta atatgttatg attgagttt aaatatctaa gttttgtaat
601 taaatttgc taaaacatat agttccacga taatttgtt actaaatctg tagttttata
661 atattctacc ttaaatctat aattttatga gaaattcagt gttaaatctg tagttttgta
721 atatattatc ttaaatatata agttttgtga aatttaatca atgtttcaca ggagacgtgg
781 catatatgtt tactccacag agcgtgtaat taaaacgtaat taaaatata[q:ga ccaacatgaa
841 cgacggaa]ga ctacgtgtga accagccagc taattggccc tggaatccgt gatgaccaag

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

19yki:g, 19yma:g, 19ssk:g

10/30

FIG. 10

SEQ I DNO: 10 S0124

1 aaaagt[p:ccca cgaaaaacagc caaaag]ttta ttaaacctta ccattgaatg cagcattgggt
61 gaccttgctg cccttcaaag ctttagttgt tcattggat caaaaggaga aatttcatcc
121 aacacgggtgc actcttggttt cccttcaaag tttgtcata gcaaccttgc aatgtctatt
181 ttttacagtt tagttacagt aatgctaa[1g]t actccccca ttccaaaata tagggcacaa
241 cgatTTTTC ccctaattgtt gcataatacg aggttcgcat gcatgcgtgc atgctattga
301 cttagcacctc cccctctctt aa[2g]ttctatt tttaaaggcct ctaccctcaa gatctctgat
361 ctctaattccc attgggtgca tgcattttat ttattggat gatccaaatt agaaggtgat
421 aataattttt tcttgggtttt tgcgttaagag atagttgctc attatattttt ggaatgttagg
481 ggagtactca tttattctag cacaccaatc tcctgtgcac caaaagtgtat tctgcacata
541 gattgagaat gcaaggttagt actaacttgc aatatagtga gtgcattaaat tgctgaatata
601 gcataaattta agaacttaag atgcatttgc agaatatttgc tcccagtttc tccactttct
661 gatgtgaact tcccttatct agatcctaca gtgggaactt tttctgttc atcttgaagt
721 atctttgtt agctgctcat caaaataatttataatttgc[6c]tataacataac ttataaccatt
781 ttgtcgaatg ttatttatct aacttcagtg acacctatta tctttgttg gggagttca
841 cacttggtaa atcccattgt ctttgcaga taacagccct gtgggattat ttttgctttc
901 acatcaatgg tgtgaaacca gtgcaaagcc gtggagctt at[q:cgattctt tgcatggcag
961 ca]aagtcatc tcccagcatt ttgggtactc atttgcaaga tattattgtt attgggtttg

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1krr:t, 2krr:a, 6krr:t

11/30

FIG. 11

SEQ ID NO:11 S0146

1 cttaatccct taatcttcat gtttagaag[p:a ttcaacggg ggatccagt]c ttcaacttgg
 61 cacgcacacg tctcaatctg cctctccatt aatagccaaa caagctgtgt ggctttctc
 121 ttgcaacttg cagctgtgct gatgttgctg cattctggtg aactaggcta aaggcattt
 181 tgtggtcagg ccctgttag ttttacggtg aaaagtttg gcgtgtcaca tcggatatac
 241 ggacacacat ttaaatatta aatatagtct aataacaaaa taaattacat attccgtctg
 301 taaattgcga gacgaattta ttaagcctaa ttaatacttt tatcaaatca tggcgcaatt
 361 aggcttaaaa gattcgtctt acaatttaca cgcaatctgt gtaatttagtt tttttattta
 421 tatttaatac taaatacatg tgtccaaata ttcgatgtga catgatgaaa agttttgcg
 481 tgaaaactaa acaggacctc atccacattt ccatggatac atatcattca tgccatggct
 541 agctacctct tgataatagt agaattgtca cgccccgaac tagtcccac cggaactagc
 601 ccgtgacgct c[5ca]atttaac ctgttaatcg ataccagtcc cagggaaatag tgctggatag
 661 acagggagac agaatatcac agcaacagag gtctcttat tatagagtag aggtacagtc
 721 atgttggct gcggacagat cccgagctca caactgcatt acagaaggga aacggaagcc
 781 aggacttggc ccaaacaaca caggcgcac ttgggaacta ggccgaaacc ctaaaactca
 841 tcatagccgg cttgctcctg gaagaact[q:cc tcatcagcag gatccgct]tc atcttctca

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

5krr:ag, 5tgr:ag, 5yma:ag, 5ksh:ag, 5tkh:ag, 5akk:ag, 5ash:ag, 5mtb:ag,
 5ymt:ag, 5don:ag, 5knh:ag

12/30

FIG. 12

SEQ ID NO: 12 S0135

1 acggaaaatg atgtaatctt ggaccactct ctgtgacctg tgttatgact tatgact[p:gtg
61 ctgcaaaggg gagtatg]aat tattgttctc aaaactagag atcactcatg ctccaggaag
121 ccttgaattt gtcttgattt atactgaaag taacctggat tcataaaatt cttgtgttcg
181 aagcgaatgg ttgaggaata ttatcggttc attgagagag agatttcatc tcagctagaa
241 aagttaatac ataaaaaaat gttgctagat acctcattga agacagttt aacccaatgg
301 aaaaaaaatg ttgcaacata tacctcattt tatttcaaca ttgcagtatt aaaagaaaatc
361 ttttatatat gctcccttta aaaaagcatc aagatgtaca agtttttagg ggtttaactt
421 ggtcaggaag aggatgtgca tcattgtcag gaagacaacg gtgtgaaacc tgtcatgaat
481 ggttagcctcc cgagacttga gctagaggac ctagtaacac cgagggcatca actagccagg
541 gatgcaagta ggcaatcaat cgaccatctc tatgagagca cgcgtgctaa tttagttaa
601 cgagtttcag atactaccta tgtcctaaaa taagttatt tttcatccat cacacatata
661 ccaatacaaa catcaaaaaga ttagaataacc agtcactaga tgaatagaag tcggggtaact
721 caaaaatcggtt catatcggtt acaagagagt cgagatgtac caaa[8g]taaaa caaatacaag
781 attattcgat tcagattgaa aacattggtt aaaagatagt tcaaagcaaa acatcggtaa
841 taaaagatga tttaaagtga aatttgctca ttattatgt aatagctcg[q:t ttgatttacg
901 aggttggcg]a ctaattaagg cttatttagt tcccaaata aaaaatttca cgcagtcata

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

8ghm:t, 8ksh:t, 8ymt:t, 8hit:t, 8mmm:t, 8fom:t, 8don:t, 8knh:t

13/30

FIG. 13

SEQ ID NO: 13 S0155

1 gaagcatctt aattccagac aagtcaaatt tcatagcaag ggacgatgtt atgattattt
61 attgaattgt acagtactat tcaacctgac aaacattgtg caatcacatg gaaatggagc
121 gttcatttat caaatttgca cgaattcggc gatctcaacc tcaagaggag caactaccgt
181 attcatcctc aatgttaatt tctcccgaa catattatcc tactaccgtt ttcatcctca
241 atgttaattt ctcccgaaac atattatcct ttcgtgcttg atctaatttt aggcatagct
301 caaaaattgt gcaactaatac tacaaaactgt gaatggacaa aaatatacag cttcagcttc
361 tcaaaaaccac ttcccccatt cgaacctgaa caaaaacccaa ctctgatggc acagtaaata
421 actaactagg gcaagaacca tcgcgcgaca cgggcgcggg ctagatcgat cgatcggtcg
481 atcaagcccc tcccccaaga gggaaacacg accagcgaca gcgatccatc caacgccgtc
541 gcatcattca cagctatacg ctagcttgg [2g]gaatcaaac catggatttt ggccttgacg
601 ttgtcgatgt gtcgctgctc tccacctcga gaaacntggc cccgtcaggt cttaaatacg
661 ggtgtctt

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

2mth:t、2krr:t、2tgr:t、2ghm:t、2mnk:t、2yma:t、2tkh:t、2akk:t、2mtb:t、
2hnh:t、2don:t

14/30

FIG. 14

SEQ ID NO: 14 S0161

1 ttataccaca ggtgctgaca ttaatatgct ttacttcag tttgtgttt gttctctgtt
61 taatcctgca tatgcctgtt aaatttatta caaagactat attaaactag ttttacctgg
121 cggaaaatatt aaactagctt tgatagttct tggcaaca acagaaccgt atttgtttt
181 tttcaaataat tatgttccat tagcgaaag agcttggttg ttttggacc tcttttttt
241 ggcaaatgaa gaatgctata tacaagctag attgcaatcg tatatcagga aattgactga
301 tcatgtatgt cgacatgtcg tctttatgg gagatgaagt ttaacttcc cccataactc
361 tggtaggct aaatgttagtt ttgcagaaat tttctgccta aatctatttt gtactttgtt
421 gatctaacat tccttacact tagtttccatttattt tgattatttt tctctgtttg
481 ttgaggcctt agcatgtttt gcttcctcct tttgctggca ggtgctgcgt gaggttacca
541 gtgatactat tggagcttgc atatgatgtg tcctttggga ccattttct gcatacgctg
601 gcagaagctg ctactagttt gttggagaac ctgttggaaag acagcttctg cttgtttgt[1a]
661 taataagatc agcttctagt tagtattact tataagttgc tgcagaattt tgcgtttgg
721 cagcaccgca gaattttta ctgtgttagaa gctgttagaac atctatataat cactttcaa
781 tttgaagaat tgtaaagaga ggcaatggcc gcattctaag caggtgctct at[q:ggaaaatc
841 cctagttgcg ca]tgtcatat agtagccat actagtataat agtagtatgt tggtaataaa

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1hts:g, 1mth:g, 1tgr:g, 1yma:g, 1akk:g, 1ank:g

15/30

FIG. 15

SEQ ID NO:15 S0177

1 [p:ccttgtggtc acacttgcgg] cggttgcgag ggccggccgc ccagaagaaa ccaggccggg
61 cttggccgcg cgcgggtcag catcctcacc gacgactcac ctgcacttct acttccacga
121 caaggtgagc aagccatcac cgacggcagt gcgggtggtg gacccggtgg acccgtcac
181 gcggtccttc tttggatga tcaacgtcat ggacgatccg ct[2g]acggagg ggcccgagcc
241 cgagtccaag cccatgggcc gggcccaggg gctgtacatg ggctcagacc aggccaagct
301 gggcttcctc caggcaatga acctgggttt caccgacggc acctacaacg gcagcgtgg
361 caccgtgctc ggccgcaact gccccttcga cgacgtccgg gagatgccgg tgatcggcgg
421 caccggcgcc ttccgcttcg cccgcggcta cgcccaggcc aggacgca[q:ca ccctggacct
481 caagaccg]ga

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

2ksh:a, 2hts:a, 2mth:a, 2yki:a, 2krr:a, 2tgr:a, 2ghm:a, 2mnk:a, 2yma:a,
2hez:a, 2tkh:a, 2akk:a, 2ash:a, 2ank:a, 2mtb:a, 2hnh:a, 2ymt:a, 2hit:a,
2mmm:a, 2fom:a, 2don:a, 2knh:a, 2ssk:a

16/30

FIG. 16

SEQ ID NO:16 S0178

1 [p:tggcatctt gcatgtttag c]tttaagatg tagtggcctt taactttata
gaaa[1t]ata[2g]g
61 attaattcct atagaatgtc atgatgcagg atgtcattaa taatcctcca agctgttccc
121 ttttaacttt ttt[3-]ccctgtt acttggaaact tgactaagga tt[4-]ctttcgat
attaatgtgg
181 attgtgtcac tgaccatatg gttgtatctt tctttcagcg cttcgctggg acttggaaatg
241 tttgtt[5g]ttt ttcagtgcct tcatggccat ggaactcaga atgtctccaa cgtgcaaatt
301 ctgggttgtg atctagaa[6g]a tggttatttg tttgaaacaa tggaaagcact tgatgttccc
361 ttagcatata cacttgttag cttgtgtga tagaattgta aagcttacat atgttttagt
421 tctactatta ttttgaagag [q:ggaaatgtgc agctggatgc]

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1krr:g, 1ghm:g, 1ksh:g, 1tkh:g, 1ynt:g, 1hit:g, 1mmm:g, 1fom:g, 1don:g,
1knh:g, 2krr:a, 2ghm:a, 2ksh:a, 2tkh:a, 2ynt:a, 2hit:a, 2mmm:a, 2fom:a,
2don:a, 2knh:a, 3krr:t, 3ghm:t, 3ksh:t, 3tkh:t, 3ynt:t, 3hit:t, 3mmm:t,
3fom:t, 3don:t, 3knh:t, 4krr:gt, 4ghm:gt, 4ksh:gt, 4tkh:gt, 4ynt:gt, 4hit:gt,
4mmm:gt, 4fom:gt, 4don:gt, 4knh:gt, 5krr:a, 5ghm:a, 5ksh:a, 5tkh:a, 5ynt:a,
5hit:a, 5mmm:a, 5fom:a, 5don:a, 5knh:a, 6krr:c, 6ghm:c, 6ksh:c, 6tkh:c,
6ynt:c, 6hit:c, 6mmm:c, 6fom:c, 6don:c, 6knh:c

17/30

FIG. 17

SEQ ID NO: 17 S0174

1 tt[p:gaatcggt tgcaggagag gg]cggtggcg atggcggagt tggtggcc gcgggtgtac
61 agctgctgct gctgccattg ccggaaccac gtctgcactc cacgacgaca tcatctccaa
121 ggccttcag gtgaagaaga acttgaggta ttggggattt gt[lg]gggctga ttgctcaagt
181 gacaaatact aatcttaggt catgtactga caatctagat tgaattggat ttaatcacta
241 ggcttctgat gtgcgtatg ccggattgat ttggtatatt atgctaaaga a[q:ggtaaaaac
301 atggcatagc cgc]a

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1ksh:a, 1tgr:a, 1mnk:a, 1yma:a, 1hez:a, 1akk:a, 1hnh:a, 1ymt:a, 1hit:a,
1mmm:a, 1fom:a, 1don:a, 1knh:a

18/30

FIG. 18

SEQ ID NO: 18 S0185

1 [p:cgaccccatg aagctttgc] ctctctcact cttcttgcca cagccaaagt atgatgctag
61 cctaatttat agcttactgt ttccgggtgtt aaatttgctt gtagattcgg gttcacgtgc
121 aaacttgaat tgataaacacc atgtcatgcc aactgctatc tttctcccaa caagtatttc
181 taaaactcaa ttgaacattg ataattctca agaaagctaa taagtgttac aaatactagc
241 agctctaaga aatatattca aattctaattg tatgcctatt aagccaaag attccactat
301 tgttagtctgc attgtttgga attaatttgat gaatctactg caggtctga ctacagaaat
361 agtgcagctt ctctgtccta tatgactata cgaaatgtta caagcaaagc atgaggaatg
421 [23a]atataaaaaa actaaacaaa tagtgaatata tctatctaata taacaccaag gagttcgta
481 actctgtttg cttctctgc aggggccaaa gtcaaggagg gggcagaggt ggtggccgtg
541 gtggtggaaag aggccgtttc cgtggccgtg gtggtgggtgg ctccgtgga agaggtgcgc
601 caagggccg tggtgacact cct[q:aggggtg gaggtcgtgg att]

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

23ksh:c, 23krr:c, 23tgr:c, 23mnk:c, 23yma:c, 23hez:c, 23tkh:c, 23akk:c,
23ash:c, 23ank:c, 23mtb:c, 23hnh:c, 23hit:c, 23mmm:c, 23fom:c, 23ssk:c

FIG. 19

SEQ ID NO:19 S0208

1 atntccccct atcggatcg tcatggagat gctactgcca ccaccgatga actcctctcc
 61 cagtcgcggc gaatcaagcg accccgatga aaaatcgagc tccccggcga cggatcgacc
 121 tgccacgatg gcggatttag cggtcacct ctccctcaccc gatccagcca
 g[1t]gtcgt[2g]gc
 181 catttcgag ctcgagctgc atgcctccgt gcgcacagcgg cggtggatcg gacaagggtg
 241 acgcggatct gtcggcctcc accccagatg agcgattttc cact[3ct]accg
 gatttag[4t]gt
 301 atatttggct ttgtctttta tctgactgga tttctcttct ttttcttctt aattaggatt
 361 caattgttct taccataaag atgttttag gcccgatttg gttaggaaaa gggggaaattt
 421 gggtaaaact ctatcggtt tctataggag agacggggat agattcggtc gttttcttta
 481 ggagggacgg acagaggaag tgccggaggc ggaggggatc gtgaacaaag gggacgctcc
 541 accaaaata

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

1hts:g, 1mth:g, 1yki:g, 1krr:g, 1tgr:g, 1ghm:g, 1mnk:g, 1yma:g, 1ksh:g,
 1akk:g, 1ank:g, 1mtb:g, 1hnh:g, 1ynt:g, 1hit:g, 1mmm:g, 1don:g, 1knh:g,
 1ssk:g, 2hts:-, 2mth:-, 2yki:-, 2krr:-, 2tgr:-, 2ghm:-, 2mnk:-, 2yma:-,
 2ksh:-, 2akk:-, 2ank:-, 2mtb:-, 2hnh:-, 2ynt:-, 2hit:-, 2mmm:-, 2don:-,
 2knh:-, 2ssk:-, 3hts:c, 3mth:c, 3yki:c, 3krr:c, 3tgr:c, 3ghm:c, 3mnk:c,
 3yma:c, 3ksh:c, 3akk:c, 3ank:c, 3mtb:c, 3hnh:c, 3ynt:c, 3hit:c, 3mmm:c,
 3don:c, 3knh:c, 3ssk:c, 4hts:c, 4mth:c, 4yki:c, 4krr:c, 4tgr:c, 4ghm:c,
 4mnk:c, 4yma:c, 4ksh:c, 4akk:c, 4ank:c, 4mtb:c, 4hnh:c, 4ynt:c, 4hit:c,
 4mmm:c, 4don:c, 4knh:c, 4ssk:c

20/30

FIG. 20

SEQ ID NO:20 S0007

1 gctagcttgg ccagcagtac gtgagtctga cgatgcat[p:gc atggatgacc ctgctaat]ta
61 attatacttc ctccatactc atagaaaaag tccttagaa caatattaa atcaaacatt
121 taaaatataa atcatgaata [3a]ctcttaat tggatgttt aaaaatgtaa aaattatatg
181 aatagatttg tcttggaaaa tactttcata aaagtgcaca tatattactt ttcaataaaat
241 atttttataag aaaaaagaag tcaaaaattgt gttttgtaaa ccgtgtcgct gtccaaaacg
301 acttccttta cgagtatcaa ccaatcgaat tgccctccct ctcaaaagtc aacccctcc
361 aaattaaagg catgcaagac gccaaaggcg gcagatctgt attcttcccg tggacggtgt
421 ggcgtatgcat gcgtacaaac tttttttt gttggatttg gtacgagcgt agctgataaa
481 gatagcttagc tcatcagctt cttcacaga atcacaagaa ctatggcat atgaatccta
541 catacttcta tccaaattcga tcgatcattc accttgcatt tatgcaatag gcaatatctg
601 agcttagcgaa cacagtaact ctccctccc ccctcctcac gcgcgcgtca taaaattaaata
661 ctccctccgt aatgtatgac gccgttaact ttttaagatg cgtttgcgt ttcatcttat
721 ataaaaaaat atataatttt tattattat taaaagatg atttactat tatattgt
781 tttgcacaaa aatttgaata agataaatag tcaaacatcg a[q:tcaaaaagt caacggcatc
841 a]tacattaaa aaataaaggt agtattcaat atttgtaaa atattgatcg gacttgcgtaaa

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

3yki:g, 3krr:g, 3ghm:g

21/30

FIG. 21

SEQ ID NO: 21 S0070

1 aacagtccctt gtatgcactg aacgtactgg tgcgg[p:cttgc ttgggcaatc gtcaa]cggtc
61 aagacgtact aaagagtggaa ttaacaaaat gaatgtttt ctaactgtat agtgaacaca
121 agcgggcacc tatagtcgt a acgaccggc ccaaattgcc cagttgcgt a cgcgagaatc
181 gatcgatcga gccgatccga tcagctagaa tattcgaacg gaataaagag aacatctcca
241 tgtcctgata cgtgtgtaca cacacgtacg tacgtgtata cgtatacgcg cgtgtgtatg
301 tgtacatatg tatatatata tatatatata catacatata tgtatgtatg tatatatata
361 tatacatatg tatgtatgta tgtatata tatacatatg tatgtatgta tgtatata
421 tatacatata tgtatgtgac ggagctcggt gctcctcacc gggagaccgc gcaggcccc[lt]
481 cttgccgggt tcggccgggg gcttagggtg agatctcaag ctctctctct ctgtgtgtgg
541 aaagatcgtc tgctagcaag aaacgcgaga caccggcgat gtatacaggt tcggccgct
601 gagaagcgta ataccctact cctgtgttt ggtggatctg tgtatgaatg agctacaaag
661 tgtgagccca cctctcccccc gttctaagct ctgaatctgg caagaatcaa ccaacccctt
721 ctctatgggc aaggcttcc tttatactt caaggggata ccacatgcac cttccctt
781 ccaaactgga cttttcttct cttaatgaac ggagattggg atggttgcgc tccgaatgac
841 acttcgatgg gacagccac acctacctcc actccggcg gagacggcg caacgtggga
901 tcgtggctgc cc[q:gttgctga cgcgaccagt gt]cagaccgg tcattttgt ccaccacgcg

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1mth:c, 1ghm:c, 1hez:c, 1don:c

22/30

FIG. 22

SEQ ID NO: 22 S0310

1 gatgacttct actccctccg tcccctaata taagggattt tgacatttt[p:g cttcccttgt
61 ttgaccactc g]tttatatt tttgtaaat ataaaaaataaaaagttgtg cttaaagtac
121 tctggataat aaagtaagtc acaaataaaa taaataataa tttcaaaatt ttct[1g]aataa
181 gacgaatggt caaaca[2g]tgc aagtaaaatg tcaaaatccc ttatattaag
[3g]gacggaggg
241 agtatgtatt acctccaaaaa tatagttaact t[4t]aagacgag atta[5g]atacc
acgaaaatata
301 attcttaact ctatgttata ggttgttata ttttttaac agaga[6g]tagt atcaattcaa
361 agtggattaa ttactcttc [7c]gt[8c]ttaaag tataataact tctaagattc
aaaatttatac
421 cccaaacaaa caactttca cctacatttc attctcaatc gactacaatc ttccactcca
481 [9t]atattttat tttctctac[10c] aatcacattc ttttcattt aacttcacac
tctctcttaa
541 aactttata ttttgatacg gaggttagtac aaaattctg atcg[11g]ttgat gtgcagtggc
601 aaaagagctc at[12g]agacatt ccactgcaca gacaatctgg gccttcttac atggactggc
661 acaatttaac atatt[13c]caag ctgtgcct[14-]gg tggatgtagg gatgcaagtg
ggtcaacccg
721 t[15a]aatccact tataatgcaaa ataagtag[16a]t att[17t]acgggt ttaccttact
aatttggttt
781 ataaaatgggt ttatgggtcg acccatttgc atctctaggt gcgataagt[q:c aagccacgac
841 ataaaaatgg] gttaccactt atttgacgta taagtagatt ggcgggtccg ttaattgca
nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

23/30

FIG. 23

1krr:a, 1tgr:a, 1ghm:a, 1mnk:a, 1yma:a, 1ksh:a, 1akk:a, 1yamt:a, 1hit:a,
 1mmm:a, 1fom:a, 1don:a, 1knh:a, 2krr:a, 2tgr:a, 2ghm:a, 2mnk:a, 2yma:a,
 2ksh:a, 2akk:a, 2yamt:a, 2hit:a, 2mmm:a, 2fom:a, 2don:a, 2knh:a, 3krr:a,
 3tgr:a, 3ghm:a, 3mnk:a, 3yma:a, 3ksh:a, 3akk:a, 3yamt:a, 3hit:a, 3mmm:a,
 3fom:a, 3don:a, 3knh:a, 4krr:-, 4tgr:-, 4ghm:-, 4mnk:-, 4yma:-, 4ksh:-,
 4akk:-, 4yamt:-, 4hit:-, 4mmm:-, 4fom:-, 4don:-, 4knh:-, 5krr:t, 5tgr:t,
 5ghm:t, 5mnk:t, 5yma:t, 5ksh:t, 5akk:t, 5yamt:t, 5hit:t, 5mmm:t, 5fom:t,
 5don:t, 5knh:t, 6krr:a, 6tgr:a, 6ghm:a, 6mnk:a, 6yma:a, 6ksh:a, 6akk:a,
 6yamt:a, 6hit:a, 6mmm:a, 6fom:a, 6don:a, 6knh:a, 7krr:t, 7tgr:t, 7ghm:t,
 7mnk:t, 7yma:t, 7ksh:t, 7akk:t, 7yamt:t, 7hit:t, 7mmm:t, 7fom:t, 7don:t,
 7knh:t, 8krr:t, 8tgr:t, 8ghm:t, 8mnk:t, 8yma:t, 8ksh:t, 8akk:t, 8yamt:t,
 8hit:t, 8mmm:t, 8fom:t, 8don:t, 8knh:t, 9krr:c, 9tgr:c, 9ghm:c, 9mnk:c,
 9yma:c, 9ksh:c, 9akk:c, 9yamt:c, 9hit:c, 9mmm:c, 9fom:c, 9don:c, 9knh:c,
 10krr:t, 10tgr:t, 10ghm:t, 10mnk:t, 10yma:t, 10ksh:t, 10akk:t, 10yamt:t,
 10hit:t, 10mmm:t, 10fom:t, 10don:t, 10knh:t, 11krr:c, 11tgr:c, 11ghm:c,
 11mnk:c, 11yma:c, 11ksh:c, 11akk:c, 11yamt:c, 11hit:c, 11mmm:c, 11fom:c,
 11don:c, 11knh:c, 12krr:c, 12tgr:c, 12ghm:c, 12mnk:c, 12yma:c, 12ksh:c,
 12akk:c, 12yamt:c, 12hit:c, 12mmm:c, 12fom:c, 12don:c, 12knh:c, 13krr:t,
 13tgr:t, 13ghm:t, 13mnk:t, 13yma:t, 13ksh:t, 13akk:t, 13yamt:t, 13hit:t,
 13mmm:t, 13fom:t, 13don:t, 13knh:t, 14krr:g, 14tgr:g, 14ghm:g, 14mnk:g,
 14yma:g, 14ksh:g, 14akk:g, 14yamt:g, 14hit:g, 14mmm:g, 14fom:g, 14don:g,
 14knh:g, 15krr:g, 15tgr:g, 15ghm:g, 15mnk:g, 15yma:g, 15ksh:g, 15akk:g,
 15yamt:g, 15hit:g, 15mmm:g, 15fom:g, 15don:g, 15knh:g, 16krr:g, 16tgr:g,
 16ghm:g, 16mnk:g, 16yma:g, 16ksh:g, 16akk:g, 16yamt:g, 16hit:g, 16mmm:g,
 16fom:g, 16don:g, 16knh:g, 17krr:c, 17tgr:c, 17ghm:c, 17mnk:c, 17yma:c,
 17ksh:c, 17akk:c, 17yamt:c, 17hit:c, 17mmm:c, 17fom:c, 17don:c, 17knh:c

24/30

FIG. 24

SEQ ID NO: 23 S0375

1 aatctgatat ttcttctggc tcaaataata attg[p:acacaa gtgtgccatt ttgc]aaaaac
61 catacctta atttcatttt atggtaacgtt tgccaaatggaa aacttgtgaa ctacactatt
121 tagttgctta [1g]tcataaaga actcaagtat tcttttttgg aggaaaagcc tttagaagagg
181 acagggagag cctgtttca ttaaagaaga agagacttgg cccagttttt gaggggaaac
241 caggccaaa aacccatgaa ctcaagtatt ctattatatg aaacttaata aactgcgtca
301 aagctgtggc cttctttct gttgtgcac atcgcaagtt taagcctgaa atatgttatt
361 tttccatgtt gcccatttctt caataatggaa agctttatata aaactcagtc aaatacaaca
421 agatgataca ttcttaattga gcccaactccc gacccctgtca agaaatgcac acagccacaa
481 aacatgaccc atctagaccc ccattgcctt cttcatgctc ttaatttctg taacataactg
541 ttcacctgtc tggctatctg ggattttca aggtgtacac ctacggcat tttgatggaa
601 ggtgaagggg aattacactca actgaacaga ggatgctggc tatacagaac tactaacatc
661 gtaagaacat tctatgattc tgatgcagac atacagtaca gttttatct aatcaaggag
721 gacgccatat gtgggacacc gcagcgaagt gtaaggagtc cttagaacatc taccttagga
781 gttaagaaga atctatgaga ttgtatgtat aaacatcagg tttctgaaa tactcttac
841 taaattccta atgcctgtat tgcaaataca tactttcagt tcgcattaaa gtgtgatagt
901 atgtatgtca cctt[q:tgttct caggttagctt ggca]aaatgg caggtcagac ggatcaagct

nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1mth:c, 1tgr:c, 1mnk:c, 1tkh:c, 1ash:c, 1mtb:c, 1hn:c, 1hit:c, 1mmmm:c,
1don:c, 1ssk:c

25/30

FIG. 25

SEQ ID NO: 24 S0346

1 gagatatatt gcaatatttt gagaattatg tgaaatgatg atttaa[p:cgtg cttggatttt
 61 tgtaagc]tct aaaatttaa gtgaggataa actatataag catataggat attataaaaa
 121 gtgaaggaga ggtatattga aatattatgt ggattatgtg ggtatgataat ttaattaaca
 181 tgcttgcatt ttaaagttct aaaacttaat aaattagcat gcttgcata gattt[1a]agat
 241 gta[2t]taaatg ttägtggatg atgtggcatc tttgcattt gagctttaag atgttagtgg
 301 cttaacttt atagaaa[3t]at a[4g]gattaatt cctatagaat gtcatgatgc
 aggatgtcat
 361 taataatcct ccaagctgtt cccttttaac tttttt[5-]ccct gttacttga aacttgaactaa
 421 ggatt[6-]ctctt cgtattaatg tggattgtgt cactgaccat atggttgtat ctttcttca
 481 ggcgttcgct gggacttgga atgtttgtt[7g] ttttcagtg ctttcatggc catggactc
 541 agaatgtctc caacgtgcaa attcttggtt gtgatctaga a[8g]atggttat ttgtttgaaa
 601 caatggaaag acttgatgtt cccttagcat atacacttgt gagcttgtgt tgatagaatt
 661 gtaaagctta catatgtttt agttctacta ttattttga a[p:ggaaatg tgcagctgga
 721 tgc]

nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

1krr:g, 1ghm:g, 1ksh:g, 1tkh:g, 1ymt:g, 1hit:g, 1mmm:g, 1fom:g, 1don:g,
 1knh:g, 2krr:g, 2ghm:g, 2ksh:g, 2tkh:g, 2ymt:g, 2hit:g, 2mmm:g, 2fom:g,
 2don:g, 2knh:g, 3krr:g, 3ghm:g, 3ksh:g, 3tkh:g, 3ymt:g, 3hit:g, 3mmm:g,
 3fom:g, 3don:g, 3knh:g, 4krr:a, 4ghm:a, 4ksh:a, 4tkh:a, 4ymt:a, 4hit:a,
 4mmm:a, 4fom:a, 4don:a, 4knh:a, 5krr:t, 5ghm:t, 5ksh:t, 5tkh:t, 5ymt:t,
 5hit:t, 5mmm:t, 5fom:t, 5don:t, 5knh:t, 6krr:gt, 6ghm:gt, 6ksh:gt, 6tkh:gt,
 6ymt:gt, 6hit:gt, 6mmm:gt, 6fom:gt, 6don:gt, 6knh:gt, 7krr:a, 7ghm:a, 7ksh:a,
 7tkh:a, 7ymt:a, 7hit:a, 7mmm:a, 7fom:a, 7don:a, 7knh:a, 8krr:c, 8ghm:c,
 8ksh:c, 8tkh:c, 8ymt:c, 8hit:c, 8mmm:c, 8fom:c, 8don:c, 8knh:c

26/30

FIG. 26

SEQ ID NO: 25 S0013

1 [p:aaattcggaa tggcttagctg] ttgagagtca ttaactccat ccatgtgatg ggtaacacct
 61 actctactct acagtataat actagtgtgg tactgatacg gtgattatat gctgtactat
 121 cattatacta ctg[2c]ggccct gtttggttct at[3gg]actaat gtttagctct
 cacatttaa
 181 [6t]tttaaatta gccctc[7a]aga atccaaacag gtggg[10c]taat tttgagctaa
 tgtgaattag
 241 cccccct[12c]aa aatattagcc cctccaag[29g]g [30a]tgctaatacg ggttaatttt
 gtgtgggat
 301 catcaaaaa[17g c]agctctctc tc[18-]ctctcttt ctactctctc caacttttag
 ccttgaatta
 361 gcccattggat ccaaatac cacccttaggc taatgtttag c[22a]tattaatt tatgactaaa
 421 cattagctct taaaattāgc cctgg[28-]ttaat cttaccaaca gagcctcggt gtgttacttg
 481 tgcacgcgat gcacggacag ttcattctc tgtttcaaa ggcttgaagc cggcaacata
 541 tcgtttcat agacagct[27a]t tgtaccacaa cggtagtacc ctacttctcc attttctact
 601 cagttcgtc tttaacaaca ccgttgtacc atgcttacca tttgcctctc tatgaaaata
 661 aaaacatcat ttcgattttc aaaaatatacg ctcaactggt ttcaactcaa ctgtctaatt
 721 aggcgatgta catatcaaca tcggaacgtc tataataact tcttaatct caaaatata[q:t
 781 tggtaatc atcgaggt]

nhb/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/ksh/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

2krr:t, 3krr:at, 6krr:c, 7krr:g, 10krr:t, 12krr:t, 17krr:at, 18krr:tctc,
 22krr:c, 28krr:g, 27krr:c, 29krr:a, 30krr:g

27/30

FIG. 27

SEQ ID NO:26 S0347

1 attttcagaa cagtcatcat agacatgcc a atttactaca agcgaagact ggagaggtta
61 ggattcaa at agttaataat taacttttt t[lg]aatcagt atgctatata tagttaaact
121 ttaggagaaa gaacattgtt gatatgaaga cactattgct ctaaatatga acaacacaca
181 caataaatct aagttcggtg tactgaacta tcaggtatgg acctatattc aaaactaaca
241 taggaggcca gcacgtggc atatcccttg atcccgaggt gaaccagttc atatttcaac
301 aagagggaa gttgtccaa tcctggttc cagaaaccac actaaacatc tttggaaaga
361 agacactcac cacgtataat agaactgctc acaagttgat ccggagctc gtatgcaagc
421 tctatggccc tgaaaacgtg aaaaaatcac tcctgcccaga actagagaac tccatgaggg
481 aaagcttggc gtcatggata ggaaaaccta gtgtcgaggt gaatgatggc gtgtcaaatg
541 taagttaca tctgcatttc tacataagta ttcacaattt cacagtgctc ataaaatcat
601 catgatgttt tactatgatt aatttctatt gtgcagatga tcttcggcct agctgccaaa
661 cattgattgg cctcgacatc accattcagg agattgaaaa agacttcag

nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1mth:c, 1krr:c, 1ghm:c, 1yma:c, 1hez:c, 1ksh:c, 1tkh:c, 1akk:c, 1ank:c,
1mtb:c, 1yml:c, 1hit:c, 1mmm:c, 1fom:c, 1don:c, 1knh:c, 1ssk:c

FIG. 28

SEQ ID NO: 27 S0330

1 cacac[p:atcaa gcacgatcg aaacg]ttgta ctgtatctcc cgccataatga ttatggagtt
61 ggcactcgag atcaagat cagaatagta tattttctg tttcaattc ttcctctcca
121 cagagctctt cctaggctcg gcttgtgaga gtaagcgcgc ctcccagcca actaagaatt
181 tgtcggcctt cgcaatgggtt gggtgcaggt ctgctgttct caactttgg attgacaaag
241 gaagacctaa ttaggacatt agcagggatt cctgtttgca ttgcagagtg tgaatcagct
301 gagactcttc ctccgctccc acatagatgc atatcattgt gctctacta aagttgattt
361 gcagacttgt tgccctagaa aactcgctca ggcaatgctt tagtgggtt acataagcaa
421 tcgaagctcg tcaaataatc aatataacat tggcatactg cagagctgta cgaggtctc
481 gagggtacag atgggttcca gaggcagggtt tgctctaaga aggcatggc gcacatctgc
541 cggatgaaca agtaaggtga cataggatca ctttgacgta gccctctt acaaccgatc
601 cacctgccc ggacttcatt gagaaggata gttgactttg aagtctgcta catgttgatc
661 acccaatggc tccaaatgtc gggaaatcctc ttggccctcat aatatcttagc agactttccc
721 atcttatggt ttaggaggaa tt[la]tatggtg tttgacaaaat ttctaattaa atcttattgg
781 catatattt tcagggaaat atattggttt tggttctaag cacaactaca aatgtgtgaa
841 aagtacaaga agctaaaaca tactgcatat caa[q:aacttgg agtccacggc cat]aaatata

nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
/hit/mmm/fom/don/knh/ssk

1krr:g

FIG. 29

SEQ ID NO: 28 S0336

1 ttgaataaac catggaaaat tattacacat ataatacatt agc[p:gaccaaa ttgttcgcc
 61 ccta]actaga ttagccccg cgcttgctg cgggatataat gttagatact ggagaaatga
 121 acaaatgatt tggattaaaa tattatgaaa atggttttag aat[1t]agtatg tttagtttg
 181 gaatgaagta aattgttagat ataattacta tatgcttgca tgtt[2a]aactt tgtgtgctta
 241 atgggtttagt gtg[3g]catgct [4a]catgta[5a]gt ttttaggagtg ctaataaata
 ctatg[6t]ttat
 301 atgttagct ttaggtgtt agtgg[7a]catt agctttatag aaagaagaga tcccttcct
 361 tttcaggtg attttctgtc cagtccacct ctttcatct tttttggta taataactct
 421 cgtggacgag aattttaggtt atttaccatc caattcgtgt gcctcaactt ttttacactc
 481 aatccgtatg ccctctataa tactccgtat gacatttagga ctgctaacta gtctatttgg
 541 taccacttcc t[8c]agtttttg atgtatttct catttcttaa ctcaatttgc atttctttta
 601 tggcattgtg gacaattttg cccctaggcc cactgtaaga tcaaaggaag attgtcgtag
 661 gctctc[9c]gga ccttccattt tattttagag ataaaagtgaa taattcaagt catcaaacaa
 721 gcataat[10g]aa acatccgacg cctcgagaga gaaatattgg agacattgct ggacctttag
 781 cctgccagtc aacttcagcc taaaatgtgc [q:tcgtcaaacc actcgaaggc] ggcgaccaga

nhb/ksh/hts/mth/yki/krr/tgr/ghm/mnk/yma/hez/tkh/akk/ash/ank/mtb/hnh/ymt
 /hit/mmm/fom/don/knh/ssk

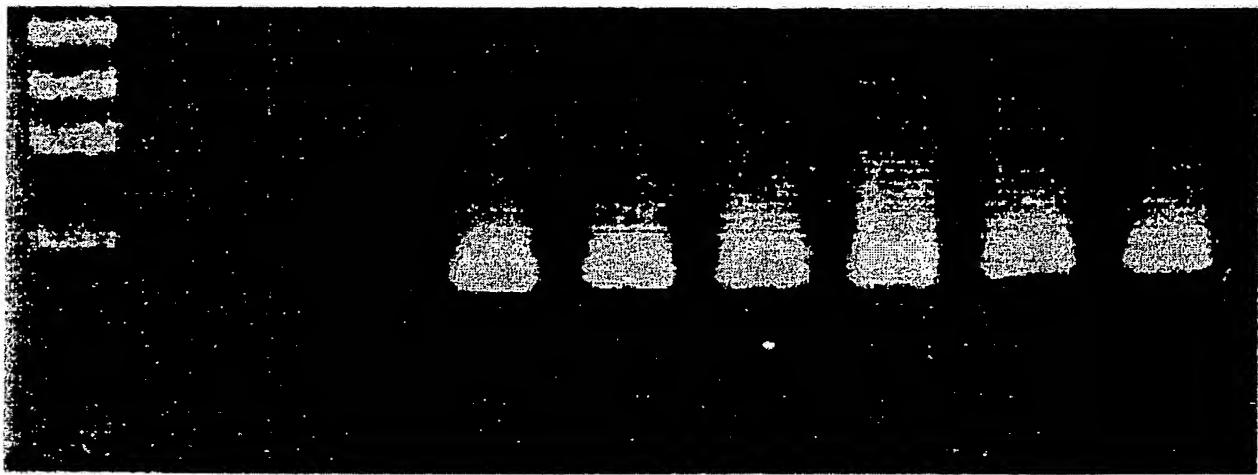
1mth:c, 1krr:c, 1tgr:c, 1mnk:c, 1yma:c, 1hez:c, 1ksh:c, 1akk:c, 1hn:c,
 1hit:c, 1mmm:c, 1fom:c, 1ssk:c, 2mth:g, 2krr:g, 2tgr:g, 2mnk:g, 2yma:g,
 2hez:g, 2ksh:g, 2akk:g, 2hn:h:g, 2hit:g, 2mmm:g, 2fom:g, 2ssk:g, 3mth:a,
 3krr:a, 3tgr:a, 3mnk:a, 3yma:a, 3hez:a, 3ksh:a, 3akk:a, 3hn:h:a, 3hit:a,
 3mmm:a, 3fom:a, 3ssk:a, 4mth:g, 4krr:g, 4tgr:g, 4mnk:g, 4yma:g, 4hez:g,
 4ksh:g, 4akk:g, 4hn:h:g, 4hit:g, 4mmm:g, 4fom:g, 4ssk:g, 5mth:g, 5krr:g,
 5tgr:g, 5mnk:g, 5yma:g, 5hez:g, 5ksh:g, 5akk:g, 5hn:h:g, 5hit:g, 5mmm:g,
 5fom:g, 5ssk:g, 6mth:c, 6krr:c, 6tgr:c, 6mnk:c, 6yma:c, 6hez:c, 6ksh:c,
 6akk:c, 6hn:h:c, 6hit:c, 6mmm:c, 6fom:c, 6ssk:c, 7mth:g, 7krr:g, 7tgr:g,
 7mnk:g, 7yma:g, 7hez:g, 7ksh:g, 7akk:g, 7hn:h:g, 7hit:g, 7mmm:g, 7fom:g,
 7ssk:g, 8mth:t, 8krr:t, 8tgr:t, 8mnk:t, 8yma:t, 8hez:t, 8ksh:t, 8akk:t,
 8hn:h:t, 8hit:t, 8mmm:t, 8fom:t, 8ssk:t, 9mth:t, 9krr:t, 9tgr:t, 9mnk:t,
 9yma:t, 9hez:t, 9ksh:t, 9akk:t, 9hn:h:t, 9hit:t, 9mmm:t, 9fom:t, 9ssk:t,
 10mth:a, 10krr:a, 10tgr:a, 10mnk:a, 10yma:a, 10hez:a, 10ksh:a, 10akk:a,
 10hn:h:a, 10hit:a, 10mmm:a, 10fom:a, 10ssk:a

10/517543

30/30

FIG. 30

M 1 2 3 4 5 6 7 8



BEST AVAILABLE COPY